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Date: MARCH 28, 2006

To: EXAMINER TIV, BACKHEAN
                         U.S. PATENT AND TRADEMARK OFFICE
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Client/Matter No.:   AUS920010712US1 (9000/61)

# of Pages: 23
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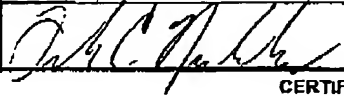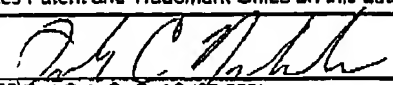
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TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

Attorney Docket No.	AUS920010712US1 (8000/61)
Application Number	10/044,997
Filing Date	JANUARY 10, 2002
First Named Inventor	CRAIG H. BECKER
Group Art Unit	2141
Examiner	TIV, BACKHEAN

ENCLOSURES *(check all that apply)*

☐ Amendment	☐ Assignment Papers	☐ Appeal Communication to Board of Appeals and Interferences
☐ After Final	☐ Drawing Sheets	
☐ Affidavits/declaration(s)	☐ After Allowance Communication to Group	☒ Appeal Brief
☐ Status Letter	☐ Petition Routing Slip (PTO/SB/69) and Accompanying Petition	☐ Proprietary Information
	☐ To Convert a Provisional Application	☐ Post Card Receipt
☐ One-Month Petition for Extension of Time Request (dup)	☐ Change of Correspondence Address	☐ Additional Enclosure(s) *(please identify below):*
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	Claims After Amendment		Highest No Previously Paid For	Present Extra	Small Entity		or	Large Entity	
					Rate	Add'l Fee		Rate	Add'l Fee
Total		Minus		0	x $25=	0		x $50=	
Indep.		Minus		0	x $100=	0		x $200=	
First Presentation of Multiple Dep. Claim					+$180=	—		+$360=	
					total add'l fee	$ 0		total add'l fee	$ 0

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	FRANK C. NICHOLAS Registration No. 33,983 CARDINAL LAW GROUP 1603 Orrington Avenue, Suite 2000 Evanston, IL 60201
Signature	*[signature]*
Date	March 28, 2005

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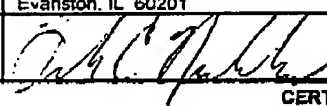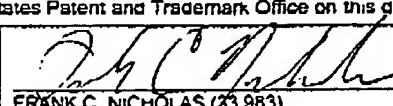
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First Presentation of Multiple Dep. Claim					+$180=	—		+ $360=	
					total add'l fee	$ 0		total add'l fee	$ 0

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	FRANK C. NICHOLAS Registration No 33,983 CARDINAL LAW GROUP 1603 Orrington Avenue, Suite 2000 Evanston, IL 60201
Signature	[signature]	Date	March 28, 2006

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_____FRANK C. NICHOLAS (33,983)_____
Name of Appellant, assignee or registered representative

_____
                    Signature

_____March 28, 2006_____
        Date of Signature

PATENT
Case No. AUS920010712US1
(9000/61)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re patent application of:)
)
        CRAIG H. BECKER, ET AL.   )   Examiner: TIV, BACKHEAN
)
Serial No.:   10/044,997   )
)   Group Art Unit: 2141
Filed: JANUARY 10, 2002   )
)   Conf. No.:2738
Title: METHOD AND SYSTEM FOR   )
        PEER TO PEER COMMUNICATION IN A)
        NETWORK ENVIRONMENT   )

APPEAL BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22202-1450

Dear Sir:

Appellants respectfully present their Brief on Appeal as follows:

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1.   <u>REAL PARTY IN INTEREST</u>

The real party in interest is assignee INTERNATIONAL BUSINESS MACHINES

CORPORATION, a corporation organized and existing under the laws of the State of New

York, USA and located at New Orchard Road, Armonk, New York 10504, USA.

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2. RELATED APPEALS AND INTERFERENCES

Appellant and the undersigned attorneys are not aware of any appeals or any

interferences which will directly affect or be directly affected by or having a bearing on the

Board's decision in the pending appeal.

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3.   STATUS OF CLAIMS

Claims 1-32 are currently pending in the application and stand finally rejected under

35 U.S.C. §103(a) as unpatentable over United States Patent Publication 2003/0095504A1 to

Ogier in view of United States Patent 5,448,561 to Kaiser in view of United States Patent

5,710,885 to Bondi. All claims are on appeal. See, the Appendix.

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4.   <u>STATUS OF AMENDMENTS</u>

All amendments have been entered.

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5. SUMMARY OF CLAIMED SUBJECT MATTER

The invention provides a method for communicating among a plurality of peer nodes
in a network environment. The method includes communicating a discovery command (p.
15, lines 10-15) from a current peer node 114 to at least one neighbor peer node 112, 116,
118, the neighbor peer node in communication with the current peer node, the discovery
command including a time to live value 410 indicative of the number of times that the
discovery command is forwarded prior to communication expiration 410. In addition, the
method includes receiving, at the current peer node, an aggregated list of peer nodes, the
aggregated list of peer nodes comprising information about at least one peer node in
communication with the at least one neighbor node, the information including an IP address
and a port number on which each peer node can accept incoming connections (p. 16 lines 20-
25), and wherein each node waits for a predetermined ping time out delay between
communicating a subsequent discovery command 502.

6.   GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Were claims 1-32 properly rejected under 35 U.S.C. §103(a) as unpatentable over

Ogier in view of Kaiser in further view of Bondi?

7. **ARGUMENTS**

The Appellants respectfully traverse the obviousness rejections of claims 1-32, because the Examiner has failed to establish a *prima facie* case of obviousness as required by MPEP §2143. Specifically, the Examiner has failed to cite a legally sufficient suggestion or a legally sufficient motivation, in Ogier in view of Kaiser in further view of Bondi to obtain the claimed invention.

In order to maintain this rejection, each and every element of the claims must be taught or suggested by the references, in at least as great detail as claimed. At a minimum, Ogier in view of Kaiser in view of Bondi fails to teach or suggest that the information include[es] a port number on which each peer node can accept incoming connections as claimed in claims 1, 13, and 23. The Examiner relies on Ogier for such a teaching, but at most, Ogier teaches that the information includes an IP address, and *not a port number on which each peer node can accept incoming connections. See,* ¶¶36, 39 of Ogier. Neither Kaiser nor Bondi cure this defect. Note that the claim requires that the information include not just a port number, but a port number on which each peer node can accept incoming connections.

Furthermore, Ogier unequivocally teaches away from the combination as suggested by the Examiner. The Examiner cannot conclusively assert that one of ordinary skill in the art would be motivated to make the suggested modifications based on the teachings of the references.

Specifically, Ogier teaches a reduced-overhead protocol for discovering new neighbor nodes and detecting the loss of existing neighbor nodes in a network. Ogier teaches that prior discovery protocols have "excessive communication overhead, and thus consume excessive bandwidth in networks with limited bandwidth." See, ¶3 of Ogier.

Thus, one of ordinary skill in the art, armed with the teachings of Ogier, would be motivated to reduce the communications overhead of a discovery protocol. The Examiner cannot conclusively assert that one of ordinary skill in the art would be motivated to *add* a time to live value indicative of the number of times that the discovery command is forwarded prior to communication expiration. Those of ordinary skill in the art would not be motivated to make any such modification (allegedly taught by Kaiser) because adding such data to the discovery command does not reduce the size of the discovery command – and actually increases the consumption of bandwidth, contrary to the teachings of Ogier. Therefore, Ogier teaches away from the Examiner's attempted combination of Ogier and Kaiser.

Additionally, Bondi teaches away from the instant claims by teaching a network management module. The instant claims require a peer-to-peer network – entirely different than having a network management module, and any modification as suggested by the Examiner would destroy the principle of operation of the reference. Those of ordinary skill in the art would not be motivated to add a network management module to a peer-to-peer network. Thus, Bondi cannot support a §103(a) rejection.

The mere fact that Ogier can be modified in view of Kaiser in further view of Bondi to obtain the claimed invention does not render the resultant modification obvious unless the prior art also suggests the desirability of the combination. See, *In re Mills*, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990) (Claims were directed to an apparatus for producing an aerated cementitious composition by drawing air into the cementitious composition by driving the output pump at a capacity greater than the feed rate. The prior art reference taught that the feed means can be run at a variable speed, however the court found that this does not require that the output pump be run at the claimed speed so that air is drawn into the mixing chamber and is entrained in the ingredients during operation. Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, there must be a suggestion or motivation in the reference to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also *In re Fritch*, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references).

Therefore, there can be no motivation to combine these references. The references themselves teach away from any such combination. Additionally, Ogier does not teach that providing a reduced-overhead protocol is not optimal and denounces protocols that consume excessive bandwidth.

Withdrawal of the rejections to claims 1-12, 14-22, and 24 -32.

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CONCLUSION

The Appellants respectfully submit that claims 1-32 fully satisfy the requirements of

35 U.S.C. §§102, 103 and 112. In view of the foregoing, favorable consideration and early

passage to issue of the present application is respectfully requested.

Dated: **March 28, 2006**

Respectfully submitted,
CRAIG H. BECKER, *et al.*

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8. CLAIMS APPENDIX

1.   A method for communicating among a plurality of peer nodes in a network environment, comprising:

communicating a discovery command from a current peer node to at least one neighbor peer node, the neighbor peer node in communication with the current peer node, the discovery command including a time to live value indicative of the number of times that the discovery command is forwarded prior to communication expiration; and

receiving, at the current peer node, an aggregated list of peer nodes, the aggregated list of peer nodes comprising information about at least one peer node in communication with the at least one neighbor node, the information including an IP address and a port number on which each peer node can accept incoming connections, and wherein each node waits for a predetermined ping time out delay between communicating a subsequent discovery command.

2.   The method of claim 1, further comprising:

communicating the discovery command to a predetermined number of neighbor peer nodes.

3.   The method of claim 2, further comprising:
determining the number of neighbor peer nodes.

4.   The method of claim 1, further comprising:
creating a peer table at the current peer node; and
updating the peer table with the aggregated list of peer nodes.

5.   The method of claim 1, further comprising:

receiving, at the current peer node, a second discovery command from an originating peer node; and

communicating, from the current peer node directly to the originating peer node, the peer table in response to the second discovery command.

6.   The method of claim 1, further comprising:

receiving a data message at the current peer node, the data message having a unique descriptor.

7.   The method of claim 6, further comprising:

comparing the descriptor of the received data message to a descriptor table, the descriptor table comprising a plurality of data messages and associated descriptors.

8.   The method of claim 7, further comprising:

updating the descriptor table with the received data message and the descriptor of the received data message.

9.   The method of claim 1, further comprising:

forwarding a query command from the current peer node to a predetermined number of neighbor peer nodes.

10.   The method of claim 1, further comprising:

receiving, at the current peer node, response data directly from at least one other peer node, the at least one other peer node in communication with the at least one neighbor node.

11. The method of claim 1, further comprising:

receiving, at the current peer node, a query command from an originating peer node; and

communicating, from the current peer node directly to the originating peer node, response data in response to the query command.

12. The method of claim 11, further comprising:

forwarding the query command from the current peer node to a predetermined number of neighbor peer nodes.

13. Computer program product in a computer usable medium for communicating among a plurality of peer nodes in a network environment, comprising:

means for communicating a discovery command from a current peer node to at least one neighbor peer node, the neighbor peer node in communication with the current peer node, the discovery command including a time to live value indicative of the number of times that the discovery command is forwarded prior to communication expiration; and

means for receiving, at the current peer node, an aggregated list of peer nodes, the aggregated list of peer nodes comprising information about at least one peer node in communication with the at least one neighbor node, the information including an IP address and a port number on which each peer node can accept incoming connections, and wherein each node waits for a predetermined ping time out delay between communicating a subsequent discovery command.

14. The product of claim 13, further comprising:

means for communicating the discovery command to a predetermined number of neighbor peer nodes; and

means for determining the number of neighbor peer nodes.

15.   The product of claim 13, further comprising:

     means for creating a peer table at the current peer node; and

     means for updating the peer table with the aggregated list of peer nodes.

16.   The product of claim 13, further comprising:

     means for receiving, at the current peer node, a second discovery command from an originating peer node; and

     means for communicating, from the current peer node directly to the originating peer node, the peer table in response to the second discovery command.

17.   The product of claim 13, further comprising:

     means for receiving a data message at the current peer node, the data message having a unique descriptor; and

     means for comparing the descriptor of the received data message to a descriptor table, the descriptor table comprising a plurality of data messages and associated descriptors.

18.   The product of claim 17, further comprising:

     means for updating the descriptor table with the received data message and the descriptor of the received data message.

19.   The product of claim 13, further comprising:

     means for communicating a query command from the current peer node to a predetermined number of neighbor peer nodes.

20.   The product of claim 13, further comprising:

     means for receiving, at the current peer node, response data directly from at least one other peer node, the at least one other peer node in communication with the at least one neighbor node.

21.   The product of claim 13, further comprising:

means for receiving, at the current peer node, a query command from an originating peer node; and

means for communicating, from the current peer node directly to the originating peer node, response data in response to the query command.

22.   The product of claim 21, further comprising:

means for forwarding the query command from the current peer node to a predetermined number of neighbor peer nodes.

23.   A system for communicating among a plurality of peer nodes in a network environment, comprising:

means for communicating a discovery command from a current peer node to at least one neighbor peer node, the neighbor peer node in communication with the current peer node, the discovery command including a time to live value indicative of the number of times that the discovery command is forwarded prior to communication expiration; and

means for receiving, at the current peer node, an aggregated list of peer nodes, the aggregated list of peer nodes comprising information about at least one peer node in communication with the at least one neighbor node, the information including an IP address and a port number on which each peer node can accept incoming connections, and wherein each node waits for a predetermined ping time out delay between communicating a subsequent discovery command.

24.   The system of claim 23, further comprising:

means for communicating the discovery command to a predetermined number of neighbor peer nodes; and

means for determining the number of neighbor peer nodes.

25. The system of claim 23, further comprising:

means for creating a peer table at the current peer node; and

means for updating the peer table with the aggregated list of peer nodes.

26. The system of claim 25, further comprising:

means for receiving, at the current peer node, a second discovery command from an originating peer node; and

means for communicating, from the current peer node directly to the originating peer node, the peer table in response to the second discovery command.

27. The system of claim 23, further comprising:

means for receiving a data message at the current peer node, the data message having a unique descriptor; and

means for comparing the descriptor of the received data message to a descriptor table, the descriptor table comprising a plurality of data messages and associated descriptors.

28. The system of claim 27, further comprising:

means for updating the descriptor table with the received data message and the descriptor of the received data message.

29. The system of claim 23, further comprising:

means for forwarding a query command from the current peer node to a predetermined number of neighbor peer nodes.

30.   The system of claim 23, further comprising:

means for receiving, at the current peer node, response data directly from at least one other peer node, the at least one other peer node in communication with the at least one neighbor node.

31.   The system of claim 23, further comprising:

means for receiving, at the current peer node, a query command from an originating peer node; and

means for communicating, from the current peer node directly to the originating peer node, response data in response to the query command.

32.   The system of claim 31, further comprising:

means for forwarding the query command from the current peer node to a predetermined number of neighbor peer nodes.

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9.   EVIDENCE APPENDIX

Appellants entered no evidence pursuant to §1.130, 1.131 or 1.132, and the Examiner
entered no evidence that was relied upon by Appellants.

10.   RELATED PROCEEDINGS APPENDIX

There are no copies of related decisions or proceedings.